

The Last Minute Market Model: an innovative service of efficient assortment management in a sustainability perspective*

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Abstract

Purpose: This paper analyses the Last Minute Market (LMM) experience, an innovative service born in Italy as an academic spin-off in order to reduce the food waste problem at the local community level. Its main purpose is to discuss how distribution can work towards greater efficiency and to lower the costs associated with assortment management from the standpoint of sustainable local growth and solidarity.

Methodology: The study is based on an inductive type of approach according to which, proposing LMM as a single case study, one may try to draw more general considerations.

Findings: The paper highlights LMM as a completely new service model, that focuses on how to get the best out of waste rather than merely eliminating it. Through this new perspective, assortment management knowledge is enriched.

As far as we know, LMM is the first meta-organization specially developed to connect both profit and no profit realms. LMM provides services aiming at the daily recovery at a local level of excess food and non-food in favor of agencies and associations that assist needy people. LMM may essentially be defined as a “gift broker”: it creates the necessary infrastructural conditions to make the transformation of waste into resources possible.

Managerial and theoretical implications: The reasons for the LMM model’s success, the effects of its presence and the conditions for its diffusion are examined as managerial

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implications. On a theoretical level, LMM contributes to unveil some of the traits of the company of the future.

Originality of the study: This paper focuses on a new Italian experience that has not yet been examined in the international service management literature.

Key words: Last Minute Market, stakeholder, service management, assortment management, sustainability, gift economy, local government

1. Introduction

The retail distribution context is increasingly becoming hypercompetitive (Sciarelli and Vona, 2000; Amine and Cadenat, 2003) due to, on the one hand the strengthening of competition in a horizontal direction between retailers having the same forms of distribution and between different forms of distribution (Fornari and Grandi, 2009), and on the other hand to the increasingly demanding customers given the ongoing crisis, which have subjected retailers to stronger competitive pressures. Retailers, in particular, while continuing to focus strongly on economic convenience, implement a differentiation strategy for the purpose of reaching positions of greater competitive edge.

One critically significant strategy is to be able to plan and manage one's own core service (Baccarani, 2005), meaning the assortment offered by points of sale (Lugli and Pellegrini, 2005; Levy and Weitz, 2008).

Assortment undoubtedly occupies a central space in business management, both for its contribution to the corporate identity and image (Castaldo and Costabile, 1996; Ailawadi and Keller, 2004; Mantrala *et al.*, 2009) and for its effects on corporate profitability. It impacts on business activities in both quality and quantity terms. Quality management of the assortment especially regards the composition and selection of the goods to be offered to the customer. Quantitative management, on the other hand, regards the ability of the retailer to avoid, on the one hand, excess stock with consequent unsold stock, on the other hand stockouts with the resulting lost sales. Retailers are faced with the problem of being able to facilitate turnover of products through efficient assortment management.

Studies in literature focus mainly on the grocery sector and, in particular, on the selection, composition and exhibition of the commercial offering (Bauer *et al.*, 2012), using assortment as a competitive leverage in terms of choice (Kahn, 1999; Briesch *et al.*, 2009) and price. There are also studies on stock management throughout the forward supply chain (Hsieh and Kleiner, 1993; Talluri *et al.*, 2004, Shapiro and Wagner, 2009) and reverse supply chain (Mollenkopf *et al.*, 2011).

Less attention however is paid to issues of management of the quantity of unsold goods. Researchers' interest in this regard is mainly oriented in two directions: the analysis of the inventory issue (Choudhary and Tripathi, 2012) and the search for the best way to reduce waste (Baharum and Pitt, 2010). Not enough research focuses on understanding the ways in which to make waste, unavoidable by its very nature, productive.

This paper aims at filling this gap in research by introducing an innovative service based on the experience of grocery business enterprises belonging to the Last Minute Market (LMM). This project, created and known only in Italy (Segrè, 2004, 2010; Segrè and Falasconi, 2008), permits distribution to work towards greater efficiency and to lower the costs associated with assortment management from the standpoint of sustainable local growth and solidarity.

In practice the perspective suggested in this paper overturns the usual approach to the problem: it does not seek formulas and algorithms to reduce waste but rather, assuming that a certain level of waste is unavoidable, reflects on the possible use of such waste.

The structure of the paper is as follows: a review of literature on efficient assortment management, followed by a description of the methodological approach that was used. This is in turn followed by an illustration and discussion of the experience of retailers involved in the LMM model, in turn followed by a discussion of consequent theoretical, managerial and social implications. The paper closes with a discussion of its limits and proposals for further future research.

2. Theoretical background

Studies about assortment management are basically developed by analyzing the following main leverages of the product offering:

- range (number of categories able to meet different types of needs) and depth (variations in product lines that meet the same need in a different way) (Lugli, 1986; Samli, 1989; Lugli, 1993; Levy and Weitz, 2008), leading retailers to make strategic choices between specialization and de-specialization,
- type of brands,
- price level,
- turnover rate of product-codes.

Each of these leverages gives rise to different lines of research which principally concern:

- a) the relationships between retailer and consumer in a perspective of store loyalty,
- b) the vertical relationships between business and industrial enterprises,
- c) efficient assortment management.

This paper belongs to this last line of analysis, examining the numerous strategic and operational choices made by the business enterprise.

From a strategic standpoint, the interest of experts is primarily directed towards two themes:

- 1) the allocation of exhibition space to categories, brands and references (e.g. Corstjens and Doyle, 1981; Bultez and Naert, 1988; Bultez *et al.*, 1989; Urban, 1998; Hübner and Kuhn, 2012),
- 2) managing the trade-off between depth of assortment and distribution costs (Kahn, 1999).

Research on the allocation of exhibition space, from qualitative and quantitative standpoints, leads to the affirmation that retailers display their most profitable products in different ways in terms of layout and product display. In particular they favor the allocation of dealer's label products (Laaksonen and Reynolds, 1994; Bergès-Sennou *et al.*, 2004) because their unit profit margin is significantly higher than they have with the sale of manufacturer's brand goods. In this way they tend to improve their profit margin and the level of service they offer to the consumer, satisfying aesthetic, economic and sales requirements.

Studies on the dynamics of increasing the assortment depth show that retailers increase the number of variations consequent to an extension in demand segments, an improvement of the service image of the retailer, an increase in levels of store loyalty, an increase in impulse purchases and an increase in the amount of the average till receipt (McKenna, 1988, Lancaster, 1991, Dhar *et al.*, 2001, Krishnan *et al.*, 2002). Some research suggests that these increases are related to increased logistics and commercial costs.

From a more strictly operational profile, the business enterprise makes decisions with regards to daily assortment management, such as determining the economic lot to purchase, choosing the most appropriate time to restock products and assessing the efficiency of assortment management. Various studies have examined the impact of the rate of stock turnover, given by the ratio between the sales of a certain product for a certain period of time and the average stock referred to the same period of time. Regardless of the method used for calculating this index, a high rate of stock turnover has both positive and negative implications for retailers (Gandolfo, 2007). Benefits include decreased operating costs, less warehouse space needed for product preservation and storage, increased freshness of products with greater shelf lives or reduced risk of obsolescence. Drawbacks concern the exclusion of certain products from the assortment, the possibility of greater purchase and logistics costs, as well as an increased risk of stockouts (Sloot *et al.*, 2005).

3. Methodology

The paper follows an inductive type of approach according to which, starting from a specific case, one tries to draw more general considerations.

The *research strategy* consisted of a *single case study*, considering that it was a question of shedding light on a specific business, or rather on a specific inter-organizational structure, and that at this time this business is unique (Yin, 2003). The LMM experience, in fact, has yet to be replicated and therefore the choice of the single case study method seems not only justified but is, in practice, the only one possible (Siggelkow, 2007). This is a typical case where the problem of great sample size is not important.

An effort was made, starting from the data collected, to integrate existing literature on assortment management and, on the basis of the uniqueness of the LMM experience, to try to start a *theory building* activity (Eisenhardt, 1989;

Eisenhardt and Graebner, 2007). It is believed that the LMM experience offers significant insight not only on assortment management but also in the relationship between the profit and the non-profit worlds, offering an interesting glimpse into future directions for business enterprises.

Regarding *data collection*, apart from consultation of secondary sources, we proceeded through two in-depth interviews, one visit to a *retail grocery* point of sale, and through consultation of the LMM website. All these activities took place on the same day in October 2010. Additional information, useful to complete a broader view, came from direct knowledge of the reality of the welfare world.

The interviews, in particular, were held, first, with the Bologna Conad store manager and the second with one of the historic members of the LMM project team. In both cases the interviews were conducted in a semi-structured manner so that, after answering a few questions defined previously, the interviewee was left free to directly explain the various aspects of the LMM experience. The duration of the interviews was 90 minutes each and the interviews were audio-recorded and later transcribed.

4. Findings

The following section illustrates the analysis of Last Minute Marketing, highlighting the objectives, the type of activity being pursued, the participants in the organizational system that has been implemented and the principles behind its approach to action. Attention will be focused in particular on the operation of the *Last Minute Food* project, where the role of the business enterprise is central, in order to understand the effects generated on assortment management.

4.1 The LMM project: objectives and core business

The first idea for the LMM project dates back to 1998 and was conceived by professor Andrea Segrè of the University of Bologna with the help of a group of university students. After a period of theoretical (1998-1999) and applicative (2000) studies to understand how to contrast the phenomenon of enormous wastage of resources¹, starting with that of the large-scale retail food trade, in 2001-2002 the

¹ “According to Last Minute Market data in Italy in 2010, 0.72% of GDP (11,201,521,410 Euros) was “burned” in foodstuffs that were wasted even though still perfectly edible. Also in 2010, approximately 3.2% of agricultural production remained in the field, equivalent to 15,128,702 tons of agricultural product. Moreover, in the Italian food industry, based on the analyzed sample, average waste amounts to 2.6% of the total final production, which leads to a total waste value of 1,786,137 tons of foodstuffs. At the household level Italy wastes, on average, 17% of purchased fruit and vegetables, 15% of fish, 28% of pasta and bread, 29% of eggs, 30% of meat and 32% of dairy products” (<http://www.lastminutemarket.it/>).

work group prepared a pilot model of measures to use to recover, in time and in space, various products otherwise destined to crushing and disposal. The LMM project was launched in 2003 on this basis, as a spin-off of the Faculty of Agriculture of the University of Bologna, becoming an entrepreneurial reality through the creation of the Carpe Cibus cooperative (Corsini, 2008). This company provides services aimed at the daily recovery of surpluses, food and otherwise, for the benefit of organizations and associations which locally assist the needy.

The basic goals of LMM go back, in the first place, to the transformation of otherwise certainly wasted products into resources and, secondly, to the contamination of land with a sustainable and socially responsible approach, to productive, commercial and consumption activities and, more generally, to the meaning of economic activity itself (Segrè, 2004).

The surplus to be recovered is represented by products that have lost their character of saleability for several reasons among which:

- damage, soiling or defects in packaging;
- too close to its expiration date, which varies from product to product (for example, a pre-packaged product must be consumed within 4 days of packaging);
- seasonality;
- imperfections / physical irregularities from bruising or wilting (for example, in the case of fresh products);
- failure to comply with standards set by the law (consider the case of seed lots with a degree of germination that is slightly below the minimum limit set by European regulations);
- exceeding the useful life of the product (from physical, technological, market standpoints);
- adverse and unexpected weather / geological events (such as an earthquake), which may cause irreparable spoilage of affected products;
- the residual character of samples or related promotional activities;
- a structural or cyclical inability to absorb of the market demand;
- an unexpected undesirability on the part of the consumer;
- the business decision to allocate stocks to the foreign market;
- the choice by the enterprise to abandon its strategic area of business, cease operations or change its image.

The recovered product however must be perfectly healthy and intact in its substance and absolutely able to perform its function.

The first project that was launched concerned the recovery of food surpluses generated by business enterprises and was named *Last Minute Food: the food of solidarity*. Before launching this initiative these surpluses were subject to disposal and/or to be animal feed only.

The proposal was then extended to other products, such as fruit and vegetables (*Last Minute Harvest: The harvest of Solidarity*) of which it is the increasingly common practice of farmers to harvest and sell only the amount thought to be

convenient from an economic standpoint, with the resulting loss of use of the remainder (Segrè and Cirri, 2010, p. 134).

In addition to the food industry, LMM started and implemented a recovery process for books and other publications destined for pulping (*Last Minute Book: The book of Solidarity*), drugs, herb products, food supplements, but also OTC drugs and products for infants about to expire (*Last Minute Pharmacy: the drug of Solidarity*), products of the seed industry (*Last Minute Seed*). Recently, finally, the *Last Minute Catering* project was also conceived and implemented, withdrawing unused meals catered to schools, companies, hospital cafeterias or barracks messes (Segrè and Cirri, 2010, pp. 135-136).

The importance and value of these initiatives have led the Italian Parliament to pass the so-called “Anti-waste Law” (Law No. 244 dated December 24th, 2007) for the recovery of non-food products, including products for personal hygiene, cleaning, home furnishing, clothing, toys, and extending the same tax benefits already provided for foodstuffs to these categories.

At the same time LMM, in close synergy with the European Parliament’s Committee on Agriculture and Rural Development, has aimed at making public institutions aware of the need to extend the policy of reducing waste to an European level, more robustly supporting a community culture that respects the common good and that is aware of the importance of protecting this good to ensure a legacy for future generations².

4.2 A dynamic and complex system of relationships

The LMM project involves numerous territorial subjects, giving rise to a dynamic and complex system of relationships including: donor organizations from both the profit and non-profit world, non-profit donee organizations, public and private institutions supporting the initiative and single individuals, the final beneficiaries of what is to be recovered and, of course, Last Minute Market, which performs the overall system coordination function (Various Authors, 2005, pp. 265-266).

For-profit *donor businesses* include structures pertaining to the primary production sector (farms), processing (food industries), distribution (wholesale markets, large-scale retail trade, small-scale retailers, catering businesses), services (multiutility and pharmacies), and publishers. Non-profit organizations like school and university cafeterias, barracks and hospitals can also play the role of donors.

Non-profit donee organizations (and in their turn donors to the needy) are formed mainly of relief organizations (Caritas, parishes, religious communities) and agencies for the coordination and management of goods collection and distribution.

² In this regard LLM created the “European days against waste 2010” project sponsored by the European Parliament - Committee on Agriculture and Rural Development. This is an organic project to investigate and explain waste in Europe and, above all, to learn ways to reduce it (Gessa, 2010; Torriero, 2011).

Public and private institutions supporting the LMM project include Regions, Provinces, Districts, Municipalities, Regional Labor Agencies, Local Health Agencies with the task of certifying the validity of recovered products, foundations, universities and waste disposal companies (Segrè, 2010a).

The *ultimate beneficiaries* of the various initiatives are to be found in the most needy, the local community and, as regards the recovery of publications, libraries.

The LMM organization basically connects the points of production and sales with relief organizations on the territory, creating a protocol of action and providing practical “turnkey” solutions to their needs. In practice, it creates the conditions for an exchange process between two worlds that generally do not have contact with each other and whose interests do not appear to converge towards a common goal.

It appears difficult for a company in the food chain to know the realities of social care, often on a small scale, present in the territory. In the same way, it is hard to believe that a charity may have persuasive force with a for-profit company.

LMM plays the role of intermediary, especially in the early stage of development of relationships, interfacing with businesses, associations, institutional realities, interpreting their language and preparing a shared code of communication aimed at promoting mutual recognition of their respective needs and resources (Segrè and Falasconi, 2002; Various Authors, 2003b, p. 91).

In this process LMM sets the so-called “rules of the game” in compliance with applicable regulations to make sure the recovery system meets the required health-hygiene safety requirements, offering tax and administrative and communications support and logistic-organizational solutions.

The relationship system that is activated and the logistic, health, administrative, tax, etc. issues have a complexity that requires professional planning and coordination (Various Authors, 2003a).

It is not, therefore, an easy system to implement. While the original entrepreneurial idea may seem easy to understand, its translation into practice requires the creation and acquisition of a wealth of knowledge, experience and bonds destined to strengthen over time and space.

4.3 The underlying principles and the approach to action

LMM may essentially be defined as a “gift broker”. It substantially creates the necessary infrastructure to enable transformation of waste into a resource (Segrè, 2004, p. 83). LMM, in fact, makes a default option, different from “normal”, available to businesses who want it. If the first commonly accepted practice was to throw unmarketable goods away, now they can not only make them useful to others but also benefit economically from this choice.

In summary, the wager won by LMM - and the contribution that this experience can bring both theoretically and practically - was to be able to make gifting convenient, not in terms of the expectation of a future reward based on a reciprocity principle or of the opportunity to “do good”, but precisely based on an (also) strictly economic argument.

The exchange between supply and demand is therefore not for a monetary reward. On this basis the various interacting stakeholders contribute to create a dynamic and stable *Solidarity Network*, made up of personal relationships and social bonds that develop horizontally and in the interests of reciprocity: to give and receive (Segrè and Cirri, 2010, p. 127; Segrè, 2010b, pp. 120-122). Appreciation of what is given and what is received gradually strengthens a sense of belonging and involvement in the protagonists, witnesses to trust and generosity, whose logic of action is aimed at achieving the common good. By doing so the unsold goods, which on the one hand completely lose their original economic exchange value, on the other hand procure valuable use-value in terms of both welfare and interrelations.

Encounters and direct contacts between the subjects where surpluses or unsold goods are generated and those who can usefully consume them are also facilitated by respecting the *principle of proximity* (Various Authors, 2005, p. 266), meaning the territorial contiguity of the parties involved, thereby minimizing the operating costs of the underlying organization system.

4.4 *The effects of Last Minute Food*

The opportunity of implementing the Last Minute Food project (LMF) came from the detection of significant quantities of surplus grocery products that are annually excluded from sale by commercial distribution structures and allocated to disposal for the various reasons already mentioned.

Following implementation of this initiative, a hypermarket in Bologna, with a sales area of 10,000 square meters, was able, in one year, to recover 170,000 kg of good quality foodstuffs (fruit and vegetables, meat, canned goods, dairy and bakery products). The goods that were recovered, with an economic value of about 650,000 Euros, were used to prepare approximately 340,000 meals for the needy. Another positive experience that can be mentioned as an example concerns a hypermarket in Modena: after two years of application of the LMF process this hypermarket calculated a 60% reduction in unsold goods (from 83,400 kg/year in 2005 to 49,900 kg/year in 2007) (<http://www.lastminutemarket.it/>). This finding offers concrete evidence of the opportunity for business enterprises to improve their business management with particular regard to assortment management.

The retailer plays a major role in implementing LMF. As an individual donor he enters into a contract with one or more donee relief organizations/associations assigned with collecting the goods so as to meet the needs of the people they assist.

Making the initial connection between the parties involved in the process is always handled by LMM, whose services are properly remunerated by the donor.

The interview with the Bologna Conad store manager made it possible to more clearly understand how the project works. The business reality that was investigated handles the identification and systematic daily collection, from the various departments where the assortment is located, of products assessed to be unfit for sale, pending check of their actual edibility and usability. These products also undergo a sorting stage to divide the collected goods into human food, animal food

and waste. At the same time they are placed in special containers to set up a dedicated area of pallets of goods to be allocated to each charity based on preset agreements. One or more people appointed by the donee(s) will be responsible for collecting the goods during a given time period (usually at 12 noon) and immediately deliver the goods to the needy community where they will be consumed. The latter may consist, for example, of supply of pre-cooked meals using what was recovered that same day from the commercial donor structure³.

The process of collecting and sorting unsold products at the Conad hypermarket requires the services of a company employee for about 3-4 hours per day⁴. The transfer of ownership of goods is certified by a specific document certifying, for accounting, tax and health and hygiene purposes⁵, on the one hand the free supply of goods and, on the other hand, the actual taking possession of the same by the beneficiary.

The many parties involved in this recovery activity were able to appropriately marry the needs and constraints related to their own activities, channeling them into a shared path of attention and response to the needs for solidarity and sustainable interventions regarding the local territory. The design of the supporting project is therefore based on several specific conditions featuring the process outlined above:

- the reference area for the collection and distribution of unsold products must be confined within a radius of a few kilometers, within which the time to transport the goods from the place of storage to the place of consumption is not more than 15-20 minutes;
- this eliminates the need to set up additional logistics facilities such as warehouses, refrigerators and vehicles that preserve the cold chain;
- the reduced space and time requirements regarding the handling of recovered goods favor the extension of the recovery process to fresh and very fresh products;
- unsold product recovery activities and those of their resultant consumption take place on a daily basis in compliance with preset constraints and regulatory and contractual obligations: this latter is not a secondary aspect because it increases the trust of the distribution company in the correctness of the mechanism, in the

³ As reported by the Bologna Conad store manager: "among the different organizations we work with and which come to collect the goods at our IperConad we include the "Pronto Soccorso Sociale" Opera Padre Marella (hostel for the homeless and distressed workers, an institution in Bologna, Italy). In a couple of hours the product leaves the point of sale and is found on the plate of the guests of the community".

⁴ It is calculated that, if this operation were promoted by all Italian hypermarkets, we could recover, save from waste disposal and donate to those without purchasing capacity a total of 45 million kilograms of products (Various Authors, 2008).

⁵ "Health and hygiene safety is ensured by stringent procedures, given the nature of the products, dictated by the self-control manual drawn up by Haccp directives (Hazard analysis and critical control points), specifically studied by an interdisciplinary work group and deeply concatenated with that of the point of sale" (Various Authors, 2003b, p. 62).

- prevention of opportunistic behaviors by the beneficiaries, in the professional and managerial expertise with which the entire system is managed;
- the process of identification and reuse of goods no longer subject to sale requires consistent actions and dedicated resources from the interacting parties. For the business enterprise this means stringent monitoring and management of its own assortment.

5. Discussion

The paper brings an entrepreneurial project not studied so far in international literature to the attention of experts of service and retail management. Furthermore, it investigates this project from a managerial profile, an unusual analysis perspective even in Italy where the Last Minute Market has been examined primarily as an action for sustainable growth and solidarity (Various Authors, 2003a; Segrè, 2004, 2008, 2010th, b; Various Authors, 2005; Segrè and Falasconi, 2008; Segrè and Cirri, 2010; Bonfanti *et al.*, 2012; Bonfanti, 2012).

5.1 Theoretical implications

LMM is a completely new model. Before its appearance, in fact, there were no similar experiences, at least in the commercial sector. Distribution companies usually disposed of products that were no longer saleable. Only outside the market context do we have the presence of subjects, of a welfare nature, who collect goods that are no longer used from private consumers (Caritas, Emmaus, and others). With some of these, however, although charity as a value prevails, there is also an economic transaction because the subject who transfers the asset is remunerated for a certain amount.

LMM, on the other hand, provides a truly innovative service. We are not simply facing a different way of doing something. We are confronted with something truly new, an activity that was previously absent. The innovation comes from having taken into account a problem that no one before had perceived as such. Waste of so many foodstuffs is usually kept well hidden from the eyes of customers and the public. The identified remedy arose as a consequence and is fairly simple in its constitutive elements. What was not obvious was the ability to “see” - and then deal with - a generally neglected state of affairs.

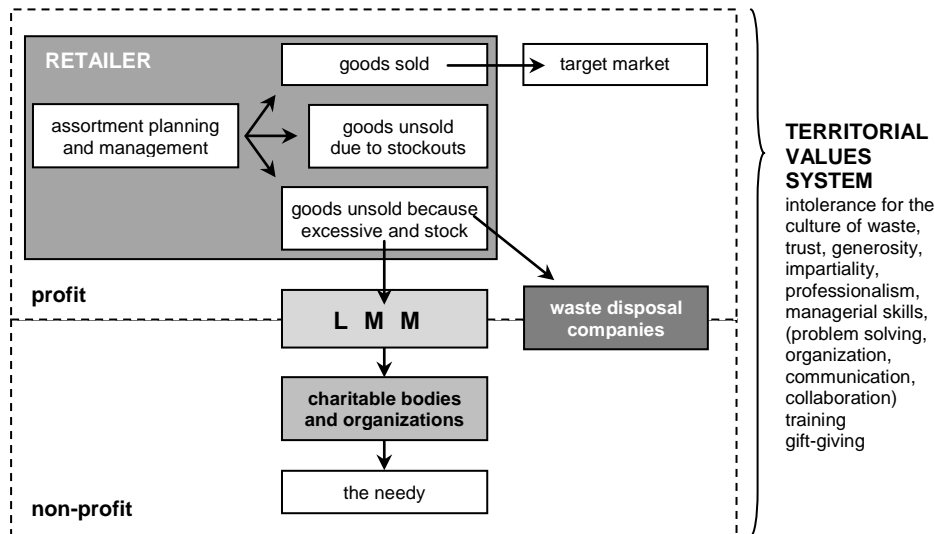
It is, in this case, an innovation which has nothing to do with technological aspects. LMM should rather act as an organizational innovation, in the sense that the system records the presence of a new stakeholder who exercises, in particular, the role of facilitator. In truth LMM does not perform any operational activity. It acts to create a protocol and bring together the ‘real’ stakeholders who operate functionally in the field. Assortment management knowledge is enriched as it adds a new perspective from which to consider the problem: that of thinking about how to make use of waste rather than merely eliminating it. In this case, it is an innovation that

could be described as radical, since it does not improve existing knowledge, but rather proposes a total reformulation of the problem.

This paper is also interesting from a theoretical point of view because it highlights a new form of cooperation between profit and non-profit worlds. In fact, supporting the Last Minute Market project not only creates benefits for the business enterprise, but also creates a system of virtuous relationships in the territory. Membership of this project leads retailers to change their points of sale from being the physical place where supply and demand meet with the mediation of a price mechanism to the place where “no bid” goods (since the goods being exchanged would no longer be saleable) are transformed into utility for the community through a gift logic. In other words, the point of sale helps create a deeper bond with the local community and also succeeds in improving assortment management efficiency. On the other hand, non-profit organizations are able to play an important role in supporting business organizations, performing a function not otherwise covered by the “normal” circuit of business relationships.

In this way LMM generates a circuit of market, economic, social and solidarity relationships which are not nor should they be “impermeable” to each other (Fig. 1). It does so through “planned cooperation” and a mindset of values of mutual openness among the various stakeholders in the territory. This system of guidelines rests fundamentally on intolerance for the culture of waste, on the authority and impartiality of the promoter, on trust, on the prevention of potential opportunistic behaviors by beneficiaries, on professional and managerial expertise (problem solving, organization, communication and collaboration) through which the entire system is managed, on the training of volunteers and on gift-giving.

Fig. 1: Virtuous circuit of relationships created in the territory by diffusion of the LMM



Source: our elaboration

The analysis of LMM makes it possible to go beyond the mere solution of a contingent efficiency problem and to glimpse the outlines of the companies of the future: those able to express their own *Weltanschauung* and to interact intelligently with each other, collaborate to solve objective problems in the territory with the prospect of attaining the well-being of businesses and, more generally, of improving the quality of life of the community.

5.2 Managerial implications

The paper highlights a project with a vision to combine, either directly or indirectly, economic, social and environmental benefits for all those involved, belonging to the profit and non-profit worlds and for the local community.

LMM may suggest a new rationale for assessing assortment choices. In fact the distribution company, to cover costs arising from the *fees* paid to LMM and the cost of staff dedicated to the initiative, eliminates certain costs tied to:

- waste reduction;
- savings in time and effort of employees for all operations relating to the management of products that is no longer necessary thanks to the implementation of a more accurate and systematic monitoring system for unsold goods;
- reduction of disposal costs of products that have become unsaleable;
- discounts on the environmental hygiene fee.

The business enterprise may also enjoy both monetary and non-monetary revenue sources. Monetary sources are, principally:

- increasing the volume of purchases by beneficiaries from the company because of a bond of mutual trust;
- recovery of VAT on goods donated to charities;
- the possibility of deducting the value of the gift from the business income.

Non-monetary revenue sources, or sources which are otherwise difficult to quantify, are:

- optimization, at least in part, of internal logistics;
- improving brand awareness, image and reputation⁶;
- increasing the level of customer loyalty;
- higher visibility in the territory due to enhanced attractiveness to the media;

⁶ The interviewee refers in this connection that “mentioning the own mark in a domestic newspaper has for the business enterprise a value that is by far higher than the value of an advertising page. Participating in LMM initiatives permits the business enterprise to enjoy, for example, in a year, at least four mentions in publications of primary importance. If, as an alternative, the company should pay for the same visibility the investment to be made would be approximately 8,000 Euros, not to speak about TV shots (40,000 Euros)”.

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- the provision of a socially useful service without the need for an organizational superstructure inside or outside the company and without the need for an increase in red tape;
 - the contribution to welfare and the improved quality (at lower costs) of such assistance by public and private institutions assisting people in distress;
 - collaboration in saving funds by charities, thanks to the donation of food with a high nutritional value; accordingly, the same charitable organizations may benefit from this greater availability of funds and use them to purchase other goods and services, which otherwise would not be affordable⁷;
 - a greater sense of belonging to the host community and the pleasure of returning a part of the resources that were withdrawn to the territory;
 - the contribution to creation of social capital, due to relationships established with individuals belonging to different fields, from profit-making distribution businesses to public agencies, from non-profit organizations to individual citizens.

The business enterprise, by engaging in the project being analyzed, assumes greater awareness of the direct and indirect effects associated with its business, at economic, social, environmental levels. At the same time it also expresses its acceptance of responsibility towards the environment, in favor of a sustainable business management and approach to consumption. This aims at concretely meeting the requirements of its customers and maintaining, or even improving, its competitive edge.

Participation in the LMM project permits the business enterprise to improve its logistics and production efficiency by paying more attention to the causes of waste formation and the need to train employees and customers on issues of consumerism, critical consumption and social distress (Segrè and Falasconi, 2008, p. 226).

In addition to these quantitative choices the LMM project also permits the acquisition of information that is useful for setting the assortment in relation to a series of qualitative aspects that affect the positioning of the entire offer. From this point of view, the offer must be consistent with the business formula, location, content of services, price level, promotional efforts deployed and the corporate image of the point of sale.

In carrying out the procedures required for the LMM initiative to be successful, as outlined in paragraph 4, the retailer implements, in its point of sale, complete and constantly monitor to check the quality of the commercial product and the services provided and compliance with the standards set out for the variables that affect consumer satisfaction. Items subject to control include the pleasantness of the environment (cleanliness), orderliness, the information necessary to assess the convenience of a purchase in relation to product characteristics, method of use and the quality/price ratio, the continued availability of products in assortment without

⁷ It could be maintained, in this case, that the LMM project acts as a “consumption multiplier” capable of fostering an increase in overall demand.

stockouts, merchandising initiatives, i.e., goods management at the point of sale performed both by the retailer and the producer (Baccarani, 2005, p. 16).

The improved efficiency by which assortment choices can be conducted in terms of quantity and quality in turn generates a positive direct impact on procurement decisions by the business enterprise and is, in its turn, affected by them. This facilitates the optimization of selection of products and suppliers (assortment quality) with a view to offering consumers high quality products with reduced environmental impact. The procurement function presents itself, *inter alia*, as complex in connection with goods supply and shipment regarding the “goal to reduce the costs of stock, avoiding conditions of stock in excess while ensuring, however, the availability of the product” (Baccarani, 2005, p. 24; Scicutella, 1989).

In addition to learning a way to improve the efficiency of assortment management in a broader perspective because what was studied shows that, if one looks at problems in a disenchanted way and especially if one does not assume the reality one is faced with as being given and unchangeable, there is always room for improvement and progress. LMM essentially lets us repeat that creativity and innovation always stem from an attitude of willingness to break with existing patterns.

5.3 Social implications

The initiative under examination is able to make the in-house organization and the local community aware of the waste problem, scheduled obsolescence and throw-away items, thus offering an effective response to solve these problems.

If we consider the scarcity of available resources, the gradual perception of their exhaustion, the search for greater equity in the use of these resources between peoples and geographic areas of the world, we understand how waste tends to be less and less tolerated. Even those who do not advocate similar theories on degrowth or the like become aware that waste is not acceptable and can no longer continue to be admitted. The economic system has a convenience in reducing waste at the earliest possible time and increasing overall efficiency (Gesualdi, 2010; Bonaretti, 2010).

The business enterprise, by participating in perfecting the innovative service being analyzed, contributes to lower the overall environmental impact of economic production and distribution thanks to the reduced flow of waste to landfills. It also increases the effectiveness of educational and information efforts, promoted in different ways by it and by the public administration and aimed at raising awareness in the local community on the issue of waste of resources and environmental protection. Increased awareness, in fact, by the local community of the importance and practical feasibility of resource recovery further strengthens the positive impact of this initiative in terms of less environment pollution and more sustainable local growth.

The recovery and gift service for no longer marketable, although still usable goods, is also able to make the various economic and social stakeholders involved in

the process aware of the contribution each can make to diffuse a culture of generosity and altruism (Segrè, 2010b). The gift economy is gradually emerging as a practical solution to the inefficiencies, the gaps and the socio-economic distortions found at global, national and local system levels.

Such conduct opens or in some cases consolidates a new philosophy of management action aimed at making organizational efficiency functional to corporate social responsibility (Segrè and Falasconi, 2008, p. 225). A managerial culture capable of witnessing the opportunity of business conduct that contributes greatly to the improvement of community well-being and encompasses a development model that is more compatible and respectful of society and the environment.

The practice, from a solidarity standpoint, of making goods that are no longer saleable and usually discarded, useful to others, in fact rewrites one of the main economic rules, that of selfish motivation and self-interest, which seemed irremovable except by prescription of law and its gradual application over time. This practice, in fact, supports the social legitimacy of the enterprise.

A business enterprise shows its willingness to actively participate in a system of inter-organizational cooperation that can meet the socio-economic requirements of the most disadvantaged (Nordiconad, 2010; Simply Market, 2010 and 2011). The social network of which it becomes an integral part not only is not closed within itself but is also capable of flexibly boosting and enhancing, in the reference territory, various types of bonds of mutual trust (Gastaldi, 2003) and knowledge (Rullani, 2003) with public institutions, businesses in the production and distribution sectors, non-profit organizations and the local community. It also helps to build a bridge between different cultures and values, fostering spontaneous cooperation and reducing transaction costs. In this way it contributes to the development of social capital, seen as a collective resource (Putnam, 1993; Fukuyama, 1995) that can represent a strategic leverage for the vitality of a territory (Mutti, 1998, p. 13) and for its competitive ability (Burgalassi, 2006).

It is a question of looking outside the range of action in which a business operates in a narrow sense, even though this can reach high levels of complexity. In this manner, a business proves itself willing to collaborate, with other companies in order to support a specific external subject that can more easily take on the burden of a project that is outside its own internal chain of values. This is a project which the individual enterprise could probably not independently address with its own financial resources and strategic intent.

6. Conclusion

As far as the limitations of this paper are concerned, in the first place it would certainly be expedient to increase the collection of field data through a larger number of interviews both to other retailers and to representatives of donee associations in order to achieve a more complete picture of the phenomenon and one

from the perspective of all stakeholders. Secondly, even a survey of customers of the business enterprises involved in the project could be useful to understand whether the often declared image benefits do or do not correspond to reality. Finally another limit may be recognized in the absence of the necessary detachment from the subject matter as a certain degree of approval of the project in the authors is evident. In this respect, hoping to have objectively proved the validity of this approval as much as possible, this limitation could be reduced by, on the one hand, making the approval precise and explicit and, on the other hand, emphasizing that this approval came after analyzing the case.

Future lines of research could gather around two major themes: one is the reflection on some aspects of the LMM model that have not been perfected yet. Another is to explore some new perspectives.

One critical issue could be the in-depth examination of the possible reduction in efforts towards efficiency that the LMM could lead to in the business enterprise. In other words to assess the risk that the organization, knowing that waste can be useful (“virtuous inefficiency” one might call it), might distort the ordinary and (correct) logics of business management. A second issue is related to examining the effects of LMM on production companies. These, at least at a first glance, appear to be the only stakeholder that is penalized by the existence of the LMM. Their market is in fact reduced due to the re-use of products which would otherwise be destroyed and which the end users would have to repurchase.

New possibilities for research include the development of a sort of algorithm to calculate the economic and possibly even extra-economic effects resulting from retailer adhesion to a LMM program with sufficient ease and accuracy. This, in fact, has so far been studied mainly in terms of environmental sustainability and social desirability, whereas more purely business studies are lacking. Another and final research perspective is twofold and concerns, on the one hand, the study of forms and conditions of integration between profit and non-profit organizations and their potential repeatability in other contexts.

On the other hand it is related to checking the possibility that waste reduction activity may also be done by profit companies *tout court*. Is it economically feasible, in other words, to develop business around such virtuous behaviors as those of recovery of products destined for destruction? Is it possible to find other types of socially desirable conduct to place at the center of entrepreneurial initiatives? And what would the business model of such an undertaking be? The relevant question that arises is essentially whether making virtuous behaviors the subject matter of business could lead to a significant increase in their diffusion and their positive effects on the entire community.

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