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Albena Pergelova, Luis Fernando Angulo Ruiz

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© Albena Pergelova, Luis Fernando Angulo Ruiz Coordinador / Coordinator *Documents de treball:*

David Urbano

http://selene.uab.es/dep-economia-empresa/dt

e-mail: <u>david.urbano@uab.es</u> Telèfon / Phone: +34 93 5814298

Fax: +34 93 5812555

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Place Marketing Performance:

Benchmarking European Cities as Business Destinations

Albena Pergelova

Assistant Professor
School of Business
Grant MacEwan University
City Centre Campus, Room 5-254A
10700 - 104 Avenue, Edmonton, AB, Canada T5J 4S2
Phone: (+1) 780 633 3798

E-mail: PergelovaA@macewan.ca

Luis Fernando Angulo Ruiz

Assistant Professor
School of Business
Grant MacEwan University
City Centre Campus, Room 5-225C
10700 - 104 Avenue, Edmonton, AB, Canada T5J 4S2
Phone: (+1) 780 633 3511

E-mail: AnguloruizL@macewan.ca

Abstract

The aim of this study is to develop a model measuring the performance of cities' marketing efforts. The model and the benchmarking methodology presented can be used by local authorities to position their marketing efforts and achievements against other (competing) cities and to identify best practices that can assist place marketers in learning how to be more efficient obtaining desired place marketing results, e.g., improved city brand image, with the available resources/budgets. The major implication for practitioners is that place marketing should be managed as a process, taking into account both the resource flows and the outputs, as well as the efficiency of this process.

Keywords: City brands, Performance of Place Marketing, Benchmarking, European Cities, Efficiency

Place Marketing Performance: Benchmarking European Cities as Business Destinations

1. Introduction

The concept of place marketing according to Ashworth and Voogd (1988) can be referred to as defining an area (a city) as a place product and subsequently developing and promoting it to meet the needs of the targeted customers by simultaneously maximizing the efficient social and economic functioning of the area concerned. In the last decade scientific interest in the topic has grown considerably and an increasing number of academic research on place marketing has been published (Cochrane & Jonas, 1999; Gibson & Davidson, 2004; Griffiths, 2006; Julier, 2005; Kotler & Gertner, 2002; Merrilees et al., 2009; Metaxas, 2010; Rantisi & Leslie, 2006). Place marketing has become increasingly popular as a means of local economic development (Gotham, 2002; Nel & Binns, 2002).

Cities can strengthen the uniqueness of their images by place branding that can help to identify the place, to distinguish it from its competitors, and to prompt investors, tourists or other target groups in their decision-making (Bramwell & Rawding, 1996; Holloway & Plant, 1992). While tourism is attracting a great deal of the efforts of place marketing researchers, a key finding appearing from the place marketing literature and practice is that countries and cities are increasingly competing to attract also businesses and investments. According to Ulaga et al. (2002), "European governments and regional authorities employ more than 3000 people and spend 12 billion dollars each year to compete for jobs and corporate taxes generated by foreign business customers". In a highly competitive environment and tough economic situation, the efficient deployment of such place marketing efforts becomes a major concern. Despite its importance for practitioners (e.g. local and regional authorities), however, the issue of achieving place marketing goals in an efficient manner has not received attention in the academic literature. Extant place marketing literature considers mainly the end-results of place marketing efforts, e.g., place image or city brand attitudes and in some cases antecedents of those attitudes (e.g., Merrilees et al., 2009), without examining how efficient city marketers are in achieving those results. Therefore, the aim of this study is to develop a place marketing performance model in which the process of using available resources to obtain desired outcomes is explicitly considered, i.e. the model zooms in simultaneously on the inputs and the outputs /results of the process, as well as the efficiency of the place marketing efforts. This model can be used as a guide for local authorities when planning and/or evaluating place marketing projects. In particular, the paper develops an efficiency measurement model for cities as business destinations.

2. Towards a Model of Place Marketing Performance

Extant literature in place marketing uses indistinctly place marketing and place branding. Place marketing has been used to refer to place identity (Gibson & Davidson, 2004), place image (Smith, 2005), and place promotion and advertising (Gotham, 2002; Urban, 2002). Place branding has been employed to denote place image (Julier, 2005) and place identity (Rantisi & Leslie, 2006).

Although it is difficult to exactly differentiate which the limits between place marketing and place branding are, this article refers to place marketing as a process that contains place branding. Place marketing involves a whole framework, while place branding implies a part of it (Ashworth & Voogd, 1990; Kotler et al., 1999; Rainisto, 2003). Planning, vision and strategic analysis are highly related to place marketing; while place identity and place image to place branding (Kavaratzis & Ashworth, 2007; Quilley, 1999). Kotler et al. (1999), when referring to place marketing, emphasize on the actors who participate in the planning group, the targets chosen in the strategic analysis of place marketing, and the factors of place branding to be considered as leverage of place identity and image.

Therefore the relevant elements of a model for measuring the performance of place marketing are the actors, the targets, and the factors. Actors play a strategic role in the success of place marketing (Kotler et al., 1999). The more relevant stakeholders participate in the development of the place marketing strategy, the higher the success of place marketing. The selection of target markets is a core task in place marketing (Kotler & Gertner, 2002). Identifying the target is a prerequisite of place marketing success because it is the base for setting the objectives to be achieved. Factors have an influential role in place branding, particularly, in the creation of place identity and image (Kotler et al., 1999). However, factors alone are not immediate solutions to achieving success of place marketing. Focused policies that integrate these three elements must be implemented and a long-term view and vision are vital (Rainisto, 2003).

2.1. The role of actors in place marketing performance

Actors in place marketing can vary according to the objective of the project. Kotler et al. (1999) suggest different stakeholders interested in collaborating in a place marketing project such as local, regional, national and even international actors. Literature of place marketing has mainly focused on the role of local actors. Local authority (also referred to as city authority or municipal authority), as a public stakeholder, plays a leading role in formulating and implementing place marketing initiatives. Local authority has been involved in projects of city image, place image reconstruction, transition to an entrepreneurial city, and town centre management (Avraham, 2000; Boyle & Hughes, 1994; Nel & Binns, 2002; Page & Hardyman, 1996; Quilley, 1999; Rantisi & Leslie, 2006). Other local public stakeholders act as supporting participants in activities of place marketing. For instance, the Tourism Bureau and the Community Development Committee participated in the construction of Still Bay's -South Africa- tourism based image and in the building of Tamworth's –Australiamusic capital based image (Gibson & Davidson, 2004; Nel & Binns, 2002).

The underlying objective that guides actors when formulating and implementing place marketing projects is to improve the economic and social development of the place. In doing so, actors identify the targets of the project, set the objectives, and manage and invest in resources necessary for the success of the project. Actors are the ones who integrate the whole process and intervene when it is necessary to modify the course of action of the project.

2.2. Target markets as a base for setting objectives of place marketing performance

It is widely known that defining market segments and targeting one or more of them is crucial for the success of strategic marketing. This is also relevant in place marketing (Ashworth & Voogd, 1990; Kotler et al., 1993; Rainisto, 2003). In the marketing of places, there are different market segments to focus on. For instance, if a place intends to attract visitors, it can concentrate either on business visitors (e.g. attending a business or convention) or on tourist and travellers, or even on both (Kotler et al., 1999). Places can also focus on attracting residents and employees such as wealthy individuals, investors, professionals and skilled employees. Places can also make efforts to attain new businesses or entrepreneurs, and to strengthen the image of the place on the export markets (Kotler et al., 1999).

A large part of the authors studied place marketing projects focused on *attracting* tourists to cities in the United Kingdom, Australia, and U.S. (Boyle & Hughes, 1994; Bradley et al., 2002; Bramwell & Rawding, 1994, 1996; Gibson & Davidson, 2004; Gotham, 2002; Smith, 2005). Other authors studied place marketing initiatives centred on *attracting* new residents and employees into cities such as Shangai, Manchester, Still-Bay, and some Swedish municipalities (Nel & Binns, 2002; Niedomysl, 2004, 2007; Wu, 2000; Young et al., 2006). A small number of place marketing studies have concentrated on projects involved in attracting new businesses to different places (e.g., Quilley, 1999; Ulaga et al., 2002; Wu, 2000).

2.3. Factors in a place marketing performance model

Places are constantly looking for factors that create place competitive advantage and in turn attract the specified target and improve place development (Rainisto, 2003). Those factors can be split into hard and soft factors (Kotler et al., 1999). Hard factors are tangible characteristics of a place. Examples of hard factors are economic stability, communication, infrastructure, and strategic location. In contrast, soft factors are intangible characteristics of a place. Quality of life, culture, flexibility and dynamism, networking, and feel of entrepreneurialism are examples of soft factors. Hard factors are no longer enough to build place competitive advantage, since soft factors are becoming ever more valued and help build an intangible association of a place (Rainisto, 2003). Research has emphasized on soft factors such as culture, values, design, cosmopolitanism, entrepreneurialism, and pro-development of government (Gibson & Davidson, 2004; Griffith, 2006; Julier, 2005; Quilley, 1999; Rantisi & Leslie, 2006; Wu, 2000; Young et al., 2006).

In order to attract the identified target, places need to exploit and/or invest in factors that are relevant in the creation of sustained competitive advantages. Factors act as key resources to achieve the place marketing objectives and in the end to enhance local economic and social development.

2.4. Integrating actors, targets, and factors into a place marketing performance model

The place marketing actors select relevant factors and identify pertinent targets based on the place marketing strategic goals set. Among all factors, actors can decide to exploit and/or develop certain hard and soft factors. As discussed earlier, the objectives of a place marketing project are associated with the identified target in terms of attracting tourists, new residents, or new businesses.

In developing a performance model, it is relevant to know which the resources are and what the expected outcomes of the use of those resources are. For measuring the performance of a place marketing project, the resources to be considered are the factors that places already possess and/or the factors that places will develop (in which places need to invest). The expected outcome of such a project can be expressed in quantitative terms such as in-flow of tourists, employees, residents, and new businesses; or in qualitative terms such as image of the city or awareness of the possibilities offered by the city. These resources (which we will refer to as inputs) and outcomes (referred to as outputs) will allow actors to measure the efficiency with which a given place is performing its place marketing (see Appendix 1).

As the interest of the current paper is on the place marketing performance of cities focused on attracting new businesses, the model presented here will focus on inputs that have been defined in the literature as important for a place to attract new businesses, such as easy access to markets, qualified labour, quality of telecommunication and transportation (Ulaga et al., 2002) as well as the climate the local government creates for businesses (Wu, 2000). From a place branding perspective, relevant outputs can be the image of the city as a good place to locate a business, and the familiarity (awareness) with cities in terms of what they can offer as a business location.

Factors (Inputs in the process of Place Marketing)
Easy access to markets
Qualified labour
Quality of telecommunication and transportation
Climate the local government creates

Objectives (Desired outputs/results)
Image of the city (as a good place to locate a business)
Familiarity (awareness) with cities in terms of what they can offer as a business location

Figure 1. Measurement model - Place Marketing Performance of Cities as Business Destinations

Efficiency of converting place marketing inputs into outputs

3. An Application of the Place Marketing Performance Model

3.1. Research approach: data envelopment analysis

The method used for measuring the place marketing performance of cities as business destinations is Data Envelopment Analysis (DEA) (Farrell, 1957; Charnes et al., 1978; Banker et al., 1984). In the DEA literature the term "decision making unit" (DMU) is used to refer to a productive entity which can be a firm, a business unit within the firm, a non-profit organization, a region, or even a country; in short all entities that use inputs to produce certain outputs. DEA is a non-parametric, linear programming based technique designed to measure the relative performance of organizations (DMUs), where the presence of multiple inputs and outputs poses difficulties for comparisons. This is usually the case for local authorities that have to control different factors (inputs) related to place marketing, as indicated in the literature review, in order to achieve one or more desired outputs, such as improved city image and awareness among investors about the business possibilities offered by a city. DEA uses the ratio of weighted inputs and outputs to produce a single measure of productivity called relative efficiency. See appendix 2 for a detailed explanation of the method.

3.2. Data

Data for this study has been gathered from the European Cities Monitor (ECM) 2010 developed by the company Cushman &Wakefield (2010). The list of cities for 2010 contains 36 European cities considered to have the strongest business representation. For the purposes of this study the scores of the following variables from the ECM 2010 report have been used. (1) Easy access to markets, qualified staff, external transport links, quality of telecommunications, and the climate the local government creates have been chosen as input variables for the DEA modelⁱ. The choice is based on the importance that these factors have received in the extant literature as drivers of developing a city image of a good place to locate a business (Ulaga et al., 2002; Wu, 2000), as well as the importance given to this factors by the managers that participated in the ECM survey. (2)The scores for "best city to locate a business" (i.e. image of the city as a business location) and "familiarity with cities as a business location" (awareness) were used as output variables. City image has long been considered an important desired outcome of place marketing initiatives (Bramwell & Rawding, 1996; Selby & Morgan, 1996). Familiarity with the city (brand) and what it offers is a necessary first step for entering into the consideration set of the target market.

4. Results and Discussion

Appendix 3 outlines the efficiency results for the 36 cities under analysis, ranked by their place marketing efficiency. In particular, appendix 3 summarizes the results of the application of DEA, bootstrap DEA and a rank comparison between bootstrap DEA scores and Cushman & Wakefield (2010) ECM report. Basic DEA scores indicate that 18 of the cities analyzed are efficient (score equal to 1). However, basic DEA scores contain potential estimation bias. The results of bias-corrected DEA provide robust efficiency estimations. Some cities considered place marketing efficient based on basic DEA scores are now inefficient based on bootstrap DEA estimation. For example, the efficiency scores of Barcelona and London are equal to 1 according to the basic DEA scores but these go up to 1.20 for Barcelona and 1.25 for London according to the bias-corrected DEA estimation. The latter is the robust efficiency score of these cities. The scores suggest that the place marketing actors of Barcelona and London could increase their outputs (in terms of image and awareness among businesses) in 20% and 25% respectively, under the same level of inputs employed.

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ⁱ Although the scores of the ECM do not reflect the actual resources employed by city administrators in activities related to improving the quality of market access, transportation, among the others, the scores are used here as a proxy of the efforts of each city in building a city image as an attractive business location.

Comparatively speaking, other cities such as Brussels and Milan have been more efficient than Barcelona and London in leveraging image and awareness with the level of inputs used.

The results also show that studying the efficiency of cities by using different variables (multiple inputs and outputs) and integrating them in one model provides new insights about the rank of the best cities as business destinations. Ranking cities by the use of only one variable e.g., "best city to locate a business" as Cushman&Wakefield (2010) does, provides insightful information for city administrators. However, this information reflects only the effectiveness of these cities (i.e. the achievement of outputs), but not the efficiency in the use of resources with which cities have achieved their goals. The raking of cities differs to that of Cushman & Wakefield when the ranking is based on the efficiency of the use of multiple resources to obtain certain objectives. Analyzing the deployment of resources such as easy access to markets, qualified staff, external transport links, among others to achieve strong place image and awareness, the best city, i.e. the most efficient city, is Brussels followed by Milan. While DEA can be very helpful in benchmarking place marketing efforts among cities, DEA has been criticised as being sensitive to the inclusion of outliers in the sample. The robustness of the efficiency estimations has been tested analyzing the sensibility of the bootstrap DEA scores obtained excluding London and Paris from the estimation, as those cities are potential outliersⁱⁱ. Spearman's rank correlation level between the bootstrap DEA scores with London and without it is 0.96 (p-value \leq = 0.001). The Spearman's rank correlation level between the bootstrap DEA scores with London and Paris and without them is 0.92 (p-value ≤ 0.001). Thus, it can be argued that the estimation of city efficiencies is not sensitive to the inclusion of London or Paris and therefore our estimations are robust.

5. Conclusions, Limitations and Future Research Lines

Our benchmarking model allows cities to be compared among them in terms of the deployment of different resources (such as access to markets, qualified staff, transportation, telecommunication, and government climate) to obtain certain objectives of place marketing, such as image and awareness. The major implication for practitioners is that place marketing should be managed as a process, taking into account both the resource flows and the outputs, as well as the efficiency of this process. If practitioners only pay attention to place marketing objectives (such as image and awareness), they could spend vast amounts of resources, thus being inefficient in their place marketing efforts; conversely, if practitioners are only interested in the use of minimum resources, they will obtain low levels of place image and awareness.

This study has several limitations that provide worthwhile opportunities for further research. First, this article studied place marketing resources measured by perceptions scores. The use of place marketing resources in monetary terms would provide more practical implications because practitioners could know the level of investment needed to place their cities on the efficiency frontier. This is so because DEA gives the possibility to perform slack analysis that provides information about the input and output slacks needed to be a best performing peer on the efficiency frontier that can serve as an example for employing efficiently resources to achieve the same level of output. Second, this study focused on a cross-sectional analysis of European cities. The introduction of a range of years would generate a longitudinal analysis and in turn provide more insightful conclusions. Third, this research is a descriptive study of benchmarking of European cities. Further research can include DEA efficiency scores in an explanatory model (e.g., including the GDP of cities as a dependent variable), and thus provide conclusions about the effect of the efficiency of place marketing on the growth of cities.

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ⁱⁱ For example, while London has 82% score for "familiarity with cities as a business location", the other cities studied have an average of 35.6%.

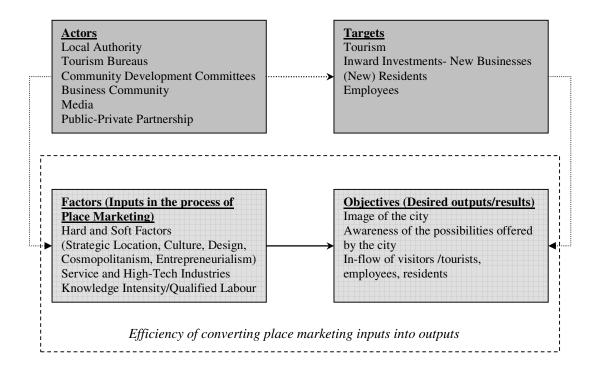
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Appendix 1. Identifying Inputs and Outputs for Measuring the Performance of Place Marketing Efforts



Appendix 2. Estimation method used: bootstrap DEA

In designing DEA it is essential to chose appropriate orientation of the model. An input oriented model will look for efficiency by proportionately reducing inputs, while an output oriented model will focus on increasing outputs given a certain level of inputs. Efficient DMUs are those for which no other DMU generates as much or more of every output (with a given level of inputs) or uses as little or less of each input (with a given level of outputs). The efficient DMUs have an efficiency score of one (or 100%), while the inefficient ones, in an input oriented DEA model, have efficiency score less than one but greater that zero, and more than one (or more than 100%) in an output oriented model. The efficiency of each unit, therefore, is measured in comparison to all other units. An important feature of DEA is that it is focused on frontier rather than central tendencies (Cooper et al., 2004). Therefore instead of trying to fit a regression plane through the centre of the data, DEA provides an efficiency frontier pointing to the best performers. For example, for a particular unit, DEA method, in contrast to regression analysis, searches for the linear combination of other units that consume the same mix of inputs and which maximizes outputs in all dimensions. DEA fits an envelope around outlying efficient firms, and inefficient firms lie strictly within this envelope (Smith, 1990).

The DEA model employed in this study is output-oriented and with variable returns to scale in order to control for possible different economies of scale at which DMUs (city authorities) operate. The model is presented below.

$$\begin{aligned}
& Max.\beta_{t}, \\
& s.t.: \\
& \sum_{k=1}^{K} \lambda_{k} \cdot y_{ikt} \geq \beta_{t} \cdot y_{it}^{o}, \qquad i=1,...,I, \\
& \sum_{k=1}^{K} \lambda_{k} \cdot x_{jkt} \leq x_{jt}^{o}, \qquad j=1,...,J, \\
& \sum_{k=1}^{K} \lambda_{k} = 1, \\
& \lambda_{k} \geq 0.
\end{aligned}$$

Where β_t is the efficiency coefficient for the unit under analysis in period t ($\beta_t = 1$ indicates that the DMU under analysis is efficient, and $\beta_t > 1$ that this DMU is inefficient. $\beta_t - 1$ determines the output growth rate required to reach the frontier), y_{it}^o is the observed outputs vector of the DMU under analysis in period t, x_{jt}^o is the observed inputs vector of the DMU under analysis in period t, y_{ikt} and x_{jkt} refer to outputs and inputs vectors for the k (k=1, ..., K) DMUs forming the total sample, and λ stands for the activity vector.

Recent research (Simar & Wilson, 1998, 2007) demonstrates that DEA efficiency coefficients are biased estimations of the true, unknown, efficiency levels, and this bias is potentially amplified when the number of units included in the sample under analysis is relatively small. As this may well be the case in our sample, bootstrapping techniques to correct the observed bias in the DEA efficiency estimates are applied in this study. The "smoothed" bootstrap approach of Simar and Wilson (1998) is used. The key assumption behind this approach is that the known bootstrap

distribution will mimic the original unknown distribution if the known data generating process (DGP) is a consistent estimator of the unknown DGP. The bootstrap process will, therefore, generate values that mimic the distributions which would be generated from the unobserved and unknown DGP (Simar & Wilson, 1998; 2000a, 2000b). Because DEA estimates a production frontier boundary, generating bootstrap samples is not straightforward. The "smoothed" bootstrap is based on the DEA estimators themselves by drawing with replacement from the original estimates of beta, and applies the reflection method proposed by Silverman (1986).

Appendix 3. Efficiency Results for 36 European Cities

City	Basic DEA score	Bootstrap DEA (bias- corrected)	Rank bootstrap DEA	Rank "best city to locate a business" Cushman &Wakefield (2010)	Score "best city to locate a business" Cushman &Wakefield (2010)	Bootstrap DEA (bias- corrected) without London	Bootstrap DEA (bias- corrected) without London nor Paris
Brussels	1.00	1.08	1	4	0.29	1.08	1.09
Milan	1.00	1.10	2	11	0.13	1.10	1.11
Munich	1.06	1.15	3	9	0.22	1.07	1.10
Frankfurt	1.07	1.15	4	3	0.36	1.16	1.19
Lyon	1.00	1.15	5	19	0.09	1.16	1.15
Budapest	1.00	1.17	6	30	0.04	1.16	1.16
Paris	1.00	1.18	7	2	0.55	1.22	-
Barcelona	1.00	1.20	8	5	0.27	1.19	1.19
Vienna	1.12	1.22	9	22	0.06	1.22	1.21
Warsaw	1.11	1.22	10	24	0.06	1.22	1.21
Dublin	1.00	1.23	11	20	0.08	1.24	1.22
Madrid	1.17	1.24	12	8	0.22	1.25	1.23
Berlin	1.14	1.25	13	7	0.24	1.24	1.22
London	1.00	1.25	14	1	0.85	-	-
Helsinki	1.00	1.27	15	31	0.04	1.29	1.29
Stockholm	1.19	1.28	16	16	0.11	1.28	1.27
Athens	1.00	1.28	17	36	0.02	1.31	1.28
Moscow	1.00	1.29	18	33	0.03	1.29	1.27
Bratislava	1.00	1.29	19	32	0.03	1.30	1.30
Düsseldorf	1.20	1.29	20	10	0.14	1.29	1.27
Istanbul	1.00	1.29	21	26	0.05	1.30	1.30
Hamburg	1.19	1.29	22	15	0.11	1.29	1.28
Rome	1.00	1.30	23	28	0.04	1.29	1.29
Oslo	1.00	1.30	24	34	0.03	1.27	1.26
Bucharest	1.00	1.30	25	35	0.02	1.31	1.31
Prague	1.00	1.30	26	21	0.07	1.32	1.27
Edinburgh	1.00	1.30	27	27	0.05	1.32	1.28
Lisbon	1.00	1.33	28	17	0.1	1.30	1.29
Geneva	1.24	1.35	29	14	0.12	1.34	1.34
Zurich	1.29	1.39	30	13	0.12	1.39	1.38
Amsterdam	1.37	1.47	31	6	0.25	1.48	1.29
Copenhagen	1.48	1.62	32	25	0.06	1.57	1.56
Glasgow	1.84	2.01	33	29	0.04	2.01	1.99
Manchester	1.89	2.01	34	12	0.12	2.01	2.00
Birmingham	2.17	2.34	35	18	0.09	2.34	2.32
Leeds	2.39	2.58	36	23	0.06	2.57	2.56

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