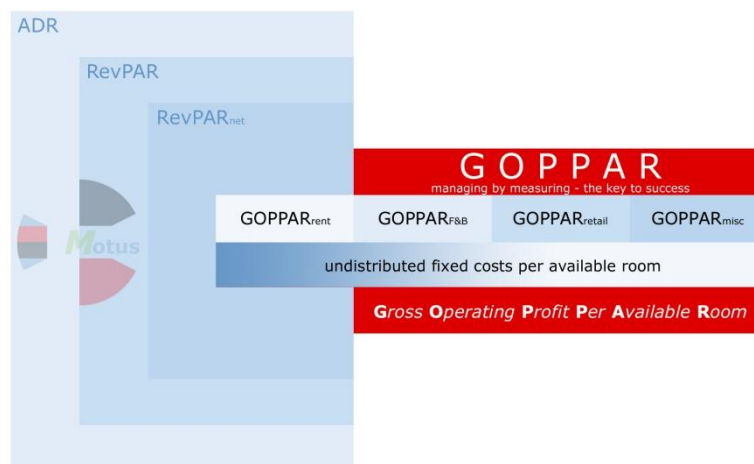


economics & information management
for hospitality and healthcare

The powerful tool for performance management,
'The GOPPAR Model'
a generous container of KPIs for hospitality



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The GOPPAR Model

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Summary	3
1 The GOPPAR Model: mathematics	3
2 The GOPPAR Model: example	4
2.1 Basics.....	4
2.2 Key performance indicators related to occupancy	5
2.3 Key performance indicators related to availability.....	6
3 The GOPPAR Model: powerful performance monitoring	7
ABOUT Motus consultancy, coaching & research	8

Summary

Revenue management, also called yield management, is the main focus in hospitality. Room nights being a perishable good it is of vital importance selling them for the highest room rate possible before their sudden demise. Let's call it what it is: rent revenue management. Being highly focused on this narrow task hotels will miss out on maximizing efficiency and secondary revenue sources, and are not aware enough of the dependency between those sources. The purpose of this article is to show the possibilities for improved daily performance management by introducing a GOPPAR model that intrinsically contains many departmental KPIs, including the most used ones, Occupancy, ADR en RevPAR. The model can easily be tailored and expanded depending on hotel specifics.

1 The GOPPAR Model: mathematics

The model is derived by translating the gross operating profit (GOP) calculation into an equation containing many useful KPIs instead of numbers that by themselves are not really useful for performance monitoring or benchmarking.

The formula below shows us the gross operating profit (GOP) derived as the sum of all operational revenue (Rev) minus all operational costs, split into variable costs (VC) and fixed costs (FC). The suffix 'n' stands for the set of differentiated revenue sources and suffix 'm' for the set of fixed cost categories, departmental or undistributed. The first part (the sum of revenue minus variable costs) is the gross profit (GP) and the last item is the sum of all fixed costs (FC).

$$GOP = \sum (Rev_n - VC_n) - \sum FC_m$$

When translating into the KPI enriched equation for GOPPAR, GOP per available room, we need to:

- reformulate revenue minus variable costs using a variable for the gross profit margin,
- replace revenue items by the product of the average daily spending and the number of booked room nights,
- divide the equation by the inventory of room nights.

$$GOPPAR = \underbrace{\left(\sum m_n \cdot ADS_n \right)}_{GPPOR} \cdot Occ - \sum FCPAR_m$$

Beside its total, which is the notorious gross operating profit per available room (GOPPAR), all variables are useful for performance monitoring. Margins (m) for the different revenue sources are indicators for efficiency, average daily spending (ADS) figures are related to pricing and demand which are giving valuable insights into customer buying and marketing effectiveness, and all items of fixed costs per available room (FCPAR) are useful for longer term analysis and benchmarking of the overall efficiency of the business. Occupancy (Occ) of course is the center KPI for marketing and strongly correlates to the average daily rate (ADR) which in the model is referred to as ADS_{rent} , the average daily spending per occupied room related to rent. Implicit KPIs are $RevPAR_n$, which is the product of Occupancy and ADS_n , and the net RevPAR (nRevPAR) being the product of $RevPAR_n$ and its margin m_n . Also in the model we see GPPOR (gross profit per occupied room) and GPPAR (gross profit per available room).

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2 The GOPPAR Model: example

In this example we take figures for a whole year for an imaginary hotel with continuous availability of 100 rooms and an occupancy of 70%, giving a total of 36.500 room nights available and 25.550 room nights rented out. To enrich the example variable costs are differentiated between sales & marketing and operations. With regard to rent the first contains transaction costs like commissions paid, and the second for example cleaning costs.

In the example there are four revenue sources (rent, services, food & beverage and retail) and four cost types for undistributed fixed costs (wages, utilities, maintenance and general & administrative).

4

2.1 Basics

differentiated revenue and costs

revenue and costs	revenue	variable costs sales & marketing	variable costs operational	fixed costs
departmental				
rent	3.000.000 €	430.000 €	225.000 €	90.000 €
services	100.000 €		145.000 €	125.000 €
f&b	1.000.000 €	17.000 €	180.000 €	285.000 €
retail	400.000 €	13.000 €	90.000 €	60.000 €
undistributed				
wages				1.550.000 €
utilities				230.000 €
maintenance				205.000 €
g&a				155.000 €
TOTAL	4.500.000 €	460.000 €	640.000 €	2.700.000 €

Derived from our basic imaginary hotel data we already see the first key performance indicators, gross profit margins for the various departments. In our example we have a negative margin for services, which could be caused by free complimentary services that we wanted separated from rent costs.

differentiated profit and KPI gross profit margin

profit	gross profit margin	gross profit (GP)	gross operating profit (GOP)
departmental			
rent	78,2%	2.345.000 €	2.255.000 €
services	-45,0%	45.000 €	170.000 €
f&b	80,3%	803.000 €	518.000 €
retail	74,3%	297.000 €	237.000 €
undistributed			
wages			1.550.000 €
utilities			230.000 €
maintenance			205.000 €
g&a			155.000 €
TOTAL	75,6%	3.400.000 €	700.000 €

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2.2 Key performance indicators related to occupancy

From the data above we can calculate the other KPIs in the GOPPAR model. Below are the KPIs related to occupation and consequently also to customers. An alternative to gross profit margin is using average daily costs per occupied room (ADC) which is also shown below.

The common KPI ADR (average daily rate) is below the ADS for rent with a value of € 117,42. TRRevPOR (Total Revenue Per Occupied Room) is € 176,13, equal to the total of average daily spending for the different departments.

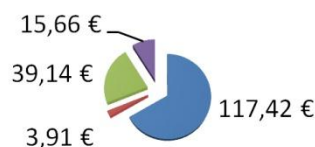
differentiated average daily customer spending, average daily costs and gross profit per occupied room

KPIs occupied room	ADS	ADC sales & marketing	ADC operations	GPPOR
departmental				
rent	117,42 €	16,83 €	8,81 €	91,78 €
services	3,91 €	0,00 €	5,68 €	1,76 €
f&b	39,14 €	0,67 €	7,05 €	31,43 €
retail	15,66 €	0,51 €	3,52 €	11,62 €
undistributed				
wages				
utilities				
maintenance				
g&a				
TOTAL	176,13 €	18,00 €	25,05 €	133,07 €

ADS

(average daily spending per room)

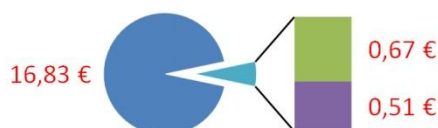
■ rent ■ services ■ f&b ■ retail



ADC sales & marketing

(average daily variable cost per room)

■ rent ■ services ■ f&b ■ retail



ADC operations

(average daily variable cost per room)

■ rent ■ services ■ f&b ■ retail



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2.3 Key performance indicators related to availability

The remaining KPIs are the ones related to availability. Including fixed costs and putting all into the perspective of availability, the inventory of room nights, they are giving the bigger picture of overall hotel performance and the structure and value of its business.

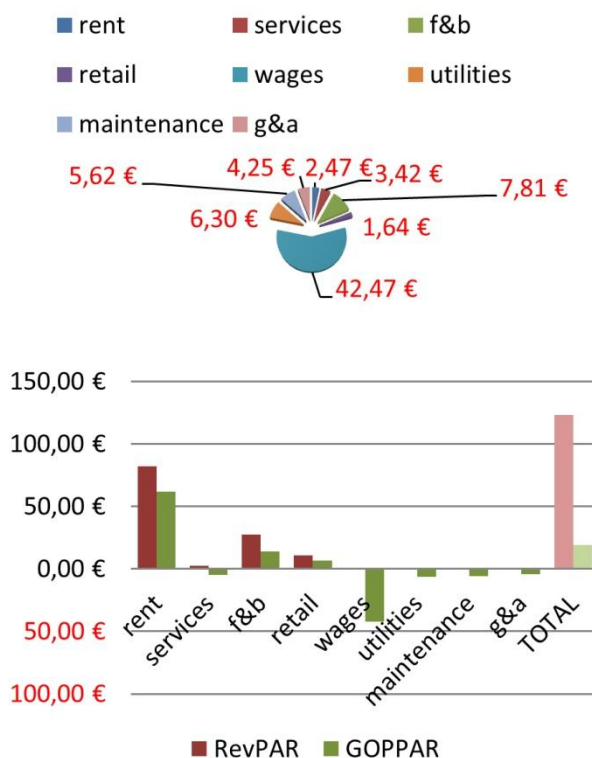
In the model the common KPI TrevPAR is the total for all differentiated RevPARs, €123,29. The overall linear equation for GOPPAR as a function of occupancy is: **GOPPAR = 133,07 x Occ - 73,97**
The ratio for degree of operating leverage (DOL) can be derived by GPPAR/GOPPAR which is 4,86.

differentiated revenue, gross profit, fixed costs and gross operating profit per available room

KPIs available room	RevPAR	GPPAR	FCPAR	GOPPAR
departmental				
rent	82,19 €	64,25 €	2,47 €	61,78 €
services	2,74 €	1,23 €	3,42 €	4,66 €
f&b	27,40 €	22,00 €	7,81 €	14,19 €
retail	10,96 €	8,14 €	1,64 €	6,49 €
undistributed				
wages			42,47 €	42,47 €
utilities			6,30 €	6,30 €
maintenance			5,62 €	5,62 €
g&a			4,25 €	4,25 €
TOTAL	123,29 €	93,15 €	73,97 €	19,18 €

FCPAR

(fixed costs per available room)



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3 The GOPPAR Model: powerful performance monitoring

The GOPPAR Model with its departmentally segmented KPIs can give valuable insights for daily monitoring. When we can put all data against last year's figures for comparable dates and periods we can enjoy a powerful tool for hospitality management.

Combined with dimensions for distribution channels and customer segments we can even do an interesting spending analysis. We can look for answers to questions like 'What type of customer from which channel will spend how much money on what that we have to offer in our hotel?'. From that we can have a more optimized targeted marketing, nice possibilities for budgetting and benchmarking, and an additional approach to hotel valuation.

Economics & Information Management

Data in Motion - Get the right information to the right person at the right time in the right format

consultancy

Motus offers consultancy for empowering information and performance management.

Different areas for consultancy are e.g.:

- . market and customer analysis
- . marketing strategy
- . revenue and cost management
- . pricing
- . business process analysis
- . master data management
- . data integration
- . business requirements analysis
- . information analysis
- . dimensional modeling
- . OLAP solution development
- . SQL development
- . relational database design



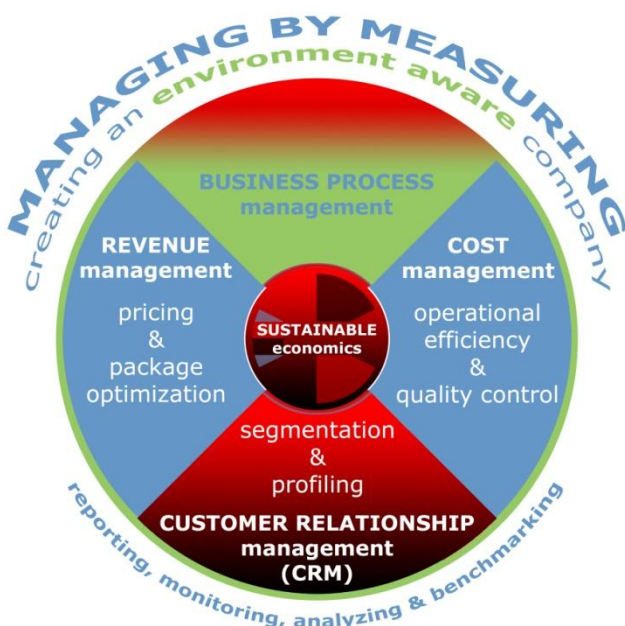
8

coaching

After analysis of specific aspects of your business, **Motus** offers coaching and training sessions for gaining understanding and acceptance with the various stakeholders. Background and usage of information and performance management solutions will be given for making sure the offered solution will be successful in real day-to-day business.

research

Motus offers insight into markets, competitors and customers, by both quantifiable and non-quantifiable research.



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