

Identifying Trends, Cycles & Behavioural Patterns

Pattern analysis identifies recurring behaviours, trends, and cycles in criminal or intelligence data. This workbook contains five worksheets covering the most common pattern types used in intelligence analysis.

Worksheet 1 — Temporal Pattern Analysis

Identify when activity occurs — time of day, day of week, month, season. Temporal patterns reveal routine, planning, and opportunity windows.

Subject / Activity:	_____
Case Reference:	_____
Period Analysed:	From: _____ To: _____
Data Source(s):	_____
Total Events Analysed:	_____

Time-of-Day Distribution

Time Block	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	% of All Events
00:00–03:59									
04:00–07:59									
08:00–11:59									
12:00–15:59									
16:00–19:59									
20:00–23:59									
TOTAL									

Temporal Pattern Summary

Peak activity period identified:	_____
Quietest period identified:	_____
Is there a regular cycle? (daily/weekly/monthly):	_____
Pattern consistency (what % of events fit the pattern?):	_____

Anomalies / outliers noted:

Analytical assessment:

Worksheet 2 — Geographic Pattern Analysis

Identify where activity concentrates — hot spots, corridors, boundary effects. Geographic patterns reveal target selection, movement routes, and operational bases.

Subject / Activity:	_____
Case Reference:	_____
Geographic Scope:	_____
Coordinate System Used:	<input type="checkbox"/> Street address <input type="checkbox"/> Lat/Long <input type="checkbox"/> Grid reference <input type="checkbox"/> Other: _____
Total Locations Analysed:	_____

Location Register

#	Location / Address	Lat/Long or Grid	Event Count	Last Activity	Category	Significance
1					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
2					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
3					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
4					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
5					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
6					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
7					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
8					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
9					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
10					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L
11					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L

#	Location / Address	Lat/Long or Grid	Event Count	Last Activity	Category	Significance
12					<input type="checkbox"/> Origin <input type="checkbox"/> Target <input type="checkbox"/> Transit <input type="checkbox"/> Base <input type="checkbox"/> Meet <input type="checkbox"/> Other	<input type="checkbox"/> H <input type="checkbox"/> M <input type="checkbox"/> L

Primary hot spot area identified: _____

Secondary cluster areas: _____

Movement corridor / route identified: _____

Distance from base to target (average): _____

Geographic anomalies noted: _____

Analytical assessment: _____

Worksheet 3 — Behavioural / Modus Operandi Pattern

Identify how activity is conducted — method, approach, tools, targets, and post-event behaviour. MO analysis reveals habit, skill level, and evolution over time.

Subject / Offender:	_____
Case Reference:	_____
Number of Events in Sample:	_____

MO Element	Consistent Pattern Observed	Variation / Evolution	Significance
Entry method / approach			■ High ■ Med ■ Low
Tools / weapons used			■ High ■ Med ■ Low
Target selection criteria			■ High ■ Med ■ Low
Day / time preference			■ High ■ Med ■ Low
Geographic preference			■ High ■ Med ■ Low
Duration of event			■ High ■ Med ■ Low
Associates involved			■ High ■ Med ■ Low
Communication method			■ High ■ Med ■ Low
Escape / exit method			■ High ■ Med ■ Low
Post-event behaviour			■ High ■ Med ■ Low
Victim / target type			■ High ■ Med ■ Low
Precautionary actions			■ High ■ Med ■ Low

Is the MO consistent across events?	_____
Has the MO evolved over time?	_____

What does the MO suggest about skill/experience level?

Analytical assessment:

Worksheet 4 — Network & Association Pattern

Map relationships between actors. Identify key nodes, brokers, and isolates. Network patterns reveal command structure, vulnerabilities, and recruitment pathways.

Actor Ref	Name / Alias	Role in Network	Connection To	Frequency of Contact	Relationship Strength	Key Node?
A01				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A02				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A03				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A04				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A05				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A06				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A07				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A08				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A09				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A10				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No
A11				<input type="checkbox"/> Daily <input type="checkbox"/> <input type="checkbox"/> Weekly <input type="checkbox"/> <input type="checkbox"/> Monthly <input type="checkbox"/> <input type="checkbox"/> Sporadic	<input type="checkbox"/> Strong <input type="checkbox"/> <input type="checkbox"/> Moderate <input type="checkbox"/> <input type="checkbox"/> Weak	<input type="checkbox"/> Yes <input type="checkbox"/> <input type="checkbox"/> No

Most connected node (broker/hub): _____

Most isolated actor:	_____
Communication / command hierarchy observed:	_____
Critical link — removal of which actor would most disrupt the network?	_____
Analytical assessment:	_____

Worksheet 5 — Trend Analysis & Forecasting

Identify whether activity is increasing, decreasing, or stable over time. Use trend data to forecast future activity and support resource allocation decisions.

Period	Event Count	Change from Prior Period	% Change	Trend Direction	Notes
Period 1				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 2				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 3				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 4				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 5				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 6				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 7				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 8				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 9				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 10				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 11				■ ↑ Up ■ → Stable ■ ↓ Down	
Period 12				■ ↑ Up ■ → Stable ■ ↓ Down	
OVERALL				■ ↑ Up ■ → Stable ■ ↓ Down	

Overall trend direction: _____

Trend start date (when did the pattern begin?): _____

Seasonal / cyclical variation: _____

Forecast — expected activity next period: _____

**Key assumptions
underpinning forecast:** _____

Analytical assessment: _____

Need Excel Version?

- Excel versions with automatic charting for all 5 worksheets are available on request.
- Email: info@theintelanalystacademy.com.au — Subject: 'Pattern Analysis — Format Request'